



Near Detector Assembly Overview, WBS 2.8

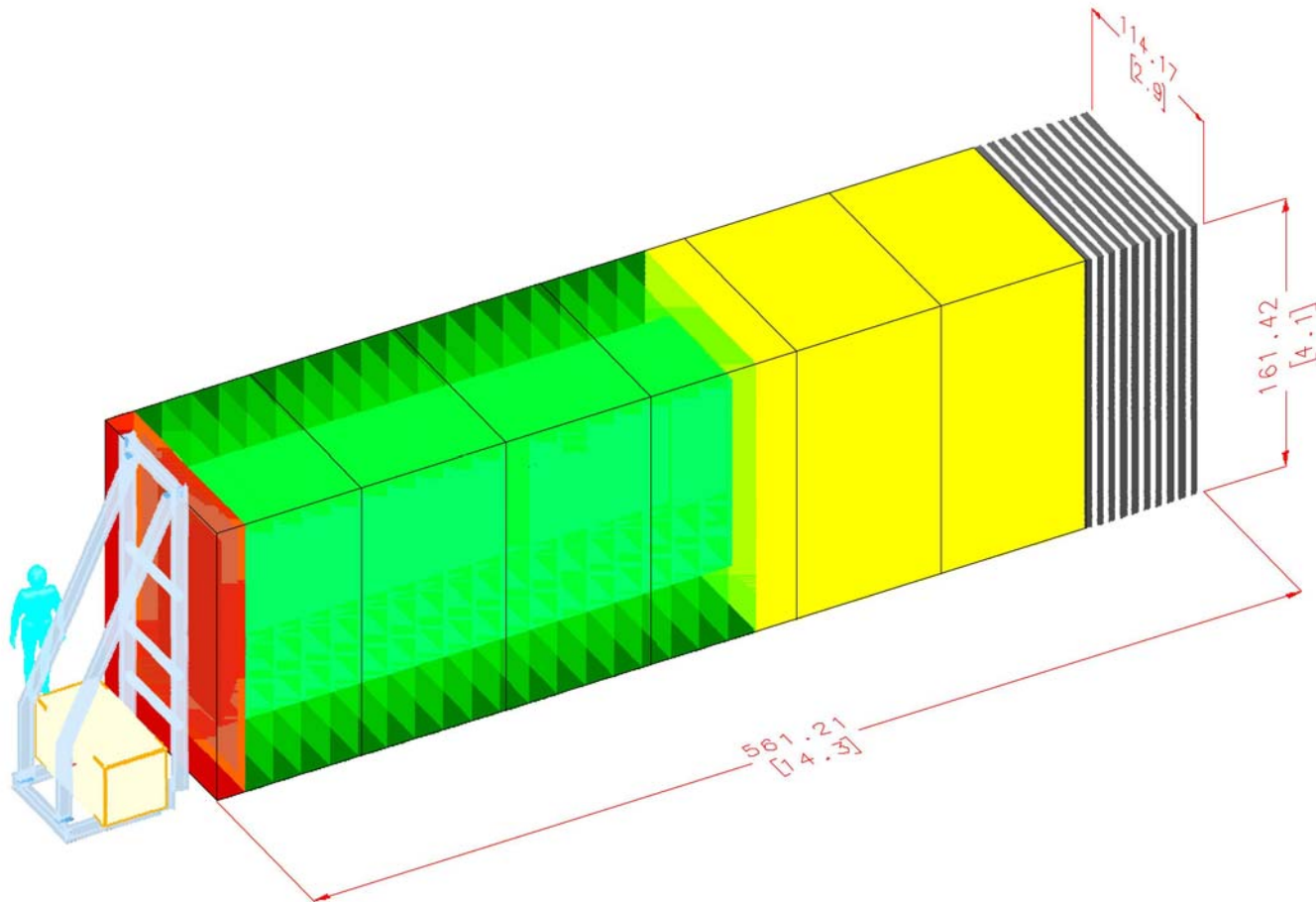
Director's Review of the NOvA Project

June 4-6, 2007

Peter Lucas, FNAL



Reminder of What the ND Looks Like...







Unique Features of ND

- Siting in or near MINOS tunnel
 - New cavern
- Steel/scintillator muon catcher
 - Steel planes constructed and installed
- Blocks remotely assembled at ANL
 - Trucked to FNAL and lowered down MINOS shaft
- Scintillator filling complication
 - Supply on surface but detector underground



Parts Transferred from IPND

- 3 physical blocks
- Scintillator for 4 blocks
 - Blocks moved empty
 - Scintillator filling equipment
- Electronics, APD, DAQ for 3 or 4 blocks
- APD cooling for two blocks
 - Cooling equipment skid
- South bookend



Schedule

- Some tunnel work must proceed during MINOS ND shutdowns. Major shutdown scheduled for 8 months starting 10/10/2010.
- Since reusing most of IPND, need a milestone that IPND work is completed. IPND nominally runs for one year.



Deliverables

- Observe cosmic rays in all planes
- Observe beam events, including muons in muon catcher
- As built survey information



Program of ND Assembly Breakout Talks

- 2.8.1 Near Detector Site Preparation
 - ‘Overview and Excavation Plan’, Dixon Bogert, 15 min
 - ‘Detector Requirements and Infrastructure’, Karen Kephart, 15 min
 - This is a major cost driver
- 2.8.2 Mechanical Construction and Installation
 - ‘ND Assembly Equipment and Support Structure’, Vic Guarino, 15 min
- 2.8.3 Scintillator Filling Equipment
 - ‘ND Scintillator Equipment’, Jim Musser, 20 min
- 2.8.4 ND Installation Coordination
 - Karen Kephart and Peter Lucas
 - ‘ND Installation Coordination’, Karen Kephart, 20 min
- 2.8.5 Management